

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
15 July 2004 (15.07.2004)

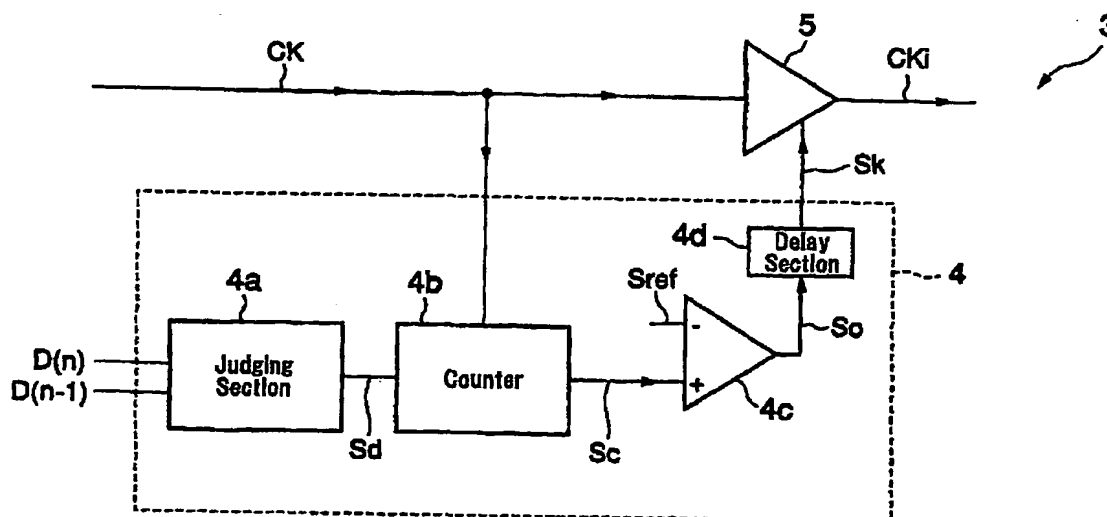
PCT

(10) International Publication Number
WO 2004/059839 A1

- (51) International Patent Classification⁷: H03K 5/13, G11C 19/28
- (21) International Application Number: PCT/IB2003/006215
- (22) International Filing Date: 22 December 2003 (22.12.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 2002-382481 27 December 2002 (27.12.2002) JP
- (71) Applicant (for all designated States except US): KONINKLIJKE PHILIPS ELECTRONICS N.V. [NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): NEGISHI, Nobuji [JP/JP]; c/o Philips Japan, Ltd., Philips Bldg., 2-13-37, Kohnan, Minato-ku, Tokyo 108-8507 (JP). KISHIDA, Masaya [JP/JP]; c/o Philips Japan, Ltd., Philips Bldg., 2-13-37, Kohnan, Minato-ku, Tokyo 108-8507 (JP).
- (74) Agent: AOKI, Hiroyoshi; c/o Philips Japan, Ltd., Philips Bldg., 2-13-37, Kohnan, Minato-ku, Tokyo 108-8507 (JP).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:
— with international search report
— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

[Continued on next page]

(54) Title: CIRCUIT ARRANGEMENT



(57) Abstract: An object of the present invention is to provide a circuit device in which the power consumption can be reduced without the dedicated signal. A circuit device (1) comprising a D flip-flop (F0) for receiving a pulse of a clock signal (CK) to introduce data therein and output said introduced data and a shift register (2), comprising the D flip-flops (F1 to F7) for introducing the data therein in accordance with the pulse to output the introduced data, for processing the outputted data from the D flip-flop (F0), wherein the circuit device (1) comprises a control circuit (3) for controlling whether the D flip-flops (F1 to F7) are supplied with the pulse of the clock signal (CK) on the basis of outputted data from the D flip-flop (F0) in accordance with the pulse of the clock signal (CK) and data to be introduced into the D flip-flop (F0) in accordance with the next pulse.

W02004/059839 A1



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

TB 03/06215

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H03K5/13 G11C19/28

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 H03K G11C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 703 663 A (SGS THOMSON MICROELECTRONICS) 27 March 1996 (1996-03-27) figure 4	1,4,6,9
X	EP 0 524 712 A (SHARP KK) 27 January 1993 (1993-01-27) figure 4	1,6,9
X	US 5 883 529 A (KUMATA ICHIRO ET AL) 16 March 1999 (1999-03-16) figure 31	1-3

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

26 April 2004

Date of mailing of the international search report

04/05/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Brown, J

BEST AVAILABLE COPY

INTERNATIONAL SEARCH REPORT

B 03/06215

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 0703663	A	27-03-1996	EP 0703663 A1	27-03-1996
			DE 69407588 D1	05-02-1998
			DE 69407588 T2	09-07-1998
			US 5670904 A	23-09-1997
EP 0524712	A	27-01-1993	JP 5028789 A	05-02-1993
			EP 0524712 A2	27-01-1993
			US 5289518 A	22-02-1994
US 5883529	A	16-03-1999	JP 9284101 A	31-10-1997

BEST AVAILABLE COPY